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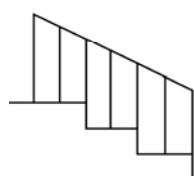
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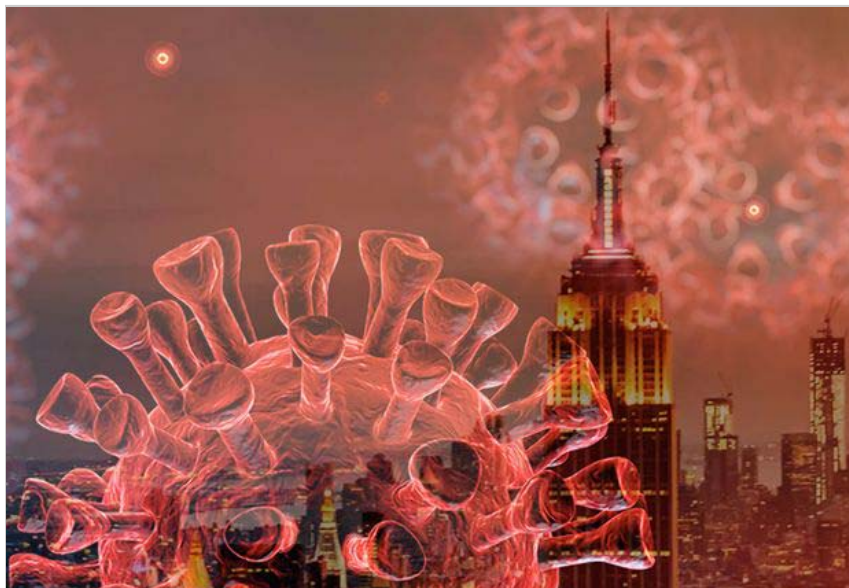
## What are the Housing Costs of Households Most Vulnerable to Job Layoffs? An Initial Analysis

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As the COVID-19 public health crisis grows in New York City and across the United States, there is significant concern about the economic effect the crisis will have on workers in occupations susceptible to mass layoffs. Workers in a number of sectors face significant income loss due to closures, reduced hours, and cancellations. While a \$2.2 trillion stimulus bill that expands unemployment benefits was signed into law last Friday, not all affected workers will have access to the expanded aid. In an effort to understand the scale of the issue and disparities when examining potential impacts by race, we reviewed pre-crisis incomes and housing costs of New York City residents who work in occupations that are more vulnerable to income loss (“vulnerable occupations”).

We invite constructive criticism and a dialogue over the methodology we use. To conduct this analysis, we used 2018 ACS Microdata on households in New York City. We separated occupations into two categories: those with the highest risk of mass layoffs and workplace closures due to the pandemic; and those likely to be more protected from widespread disruption. Our categorization draws on work by others (including the Brookings Institution, Moody's, and the U.S. Private Sector Job Quality Index Team) in identifying the industries and occupations most vulnerable to job loss due to the pandemic. Other kinds of analyses focus on the susceptibility of certain workers to contracting the virus, due to the essential nature of the job and the inability of these workers to work from home. While these workers aren't necessarily in industries facing mass layoffs, some may likely still face loss in wages associated with their inability to continue working. Additionally, our numbers assume that all workers in a vulnerable occupation group are prone to layoffs, when it is likely that a percentage of each category are able to maintain their incomes. Because this proportion is unknown, we err on the side of considering all workers in a category at risk. In total, we estimate that about 1,405,000 (or 34 percent) of the city's wage earners may be at risk of income loss.

You can find our occupation categorization here, and all of the data and code for this analysis are available on our GitHub. Again, we invite your advice and feedback.

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Based on these assumptions, which we subject to further refinement, we find that:

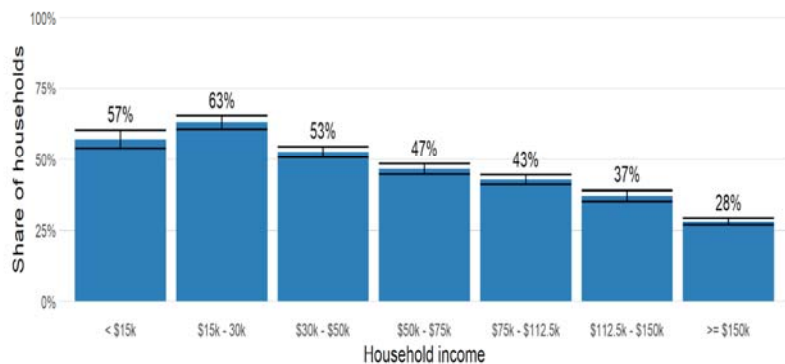
- In 2018, lower income households were more likely to work in occupations prone to COVID-related job loss.
- Out of almost 3.2 million households in New York City, almost 1,032,000 (totaling nearly 3.5 million people) had at least one household member that worked in a vulnerable occupation, and that person earned about 67 percent of the total income for the household.
- In about 549,000 households, all earners worked in vulnerable occupations, making these households hyper-susceptible to income loss.
- For households that earned less than \$150,000 and had at least one worker in a vulnerable occupation in 2018, the median household monthly income was about \$4,580 and the median rent was about \$1,430.
- Hispanic workers in particular disproportionately worked in vulnerable occupations in 2018. The potential negative impact for low-income people of color, who are predominantly renters, could be at a scale equivalent to the effects of the foreclosure crisis.

**Lower income workers are significantly more likely to rely on employment income from jobs that are prone to job loss.**

More than 60 percent of households that earned between \$15,000 and \$30,000 had at least one household member employed in a vulnerable occupation, compared to 28 percent of households that earned more than \$150,000. Households are dependent on this income: workers in vulnerable occupations earned about 67 percent of the total income for their household. Finally, the scale of affected households is quite large. About 1,032,000 New York City households (out of almost 3.2 million) had at least one household member that worked in a vulnerable occupation.

### Share of households with at least one member employed in a more vulnerable occupation by household income

New York City, 2018

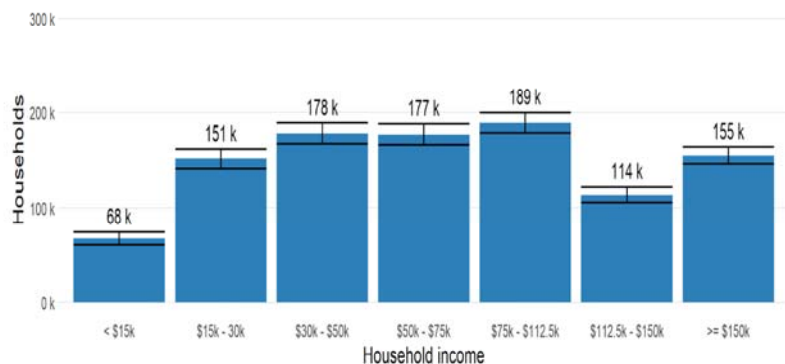


Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

### Households with at least one member employed in a more vulnerable occupation by household income

New York City, 2018



Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

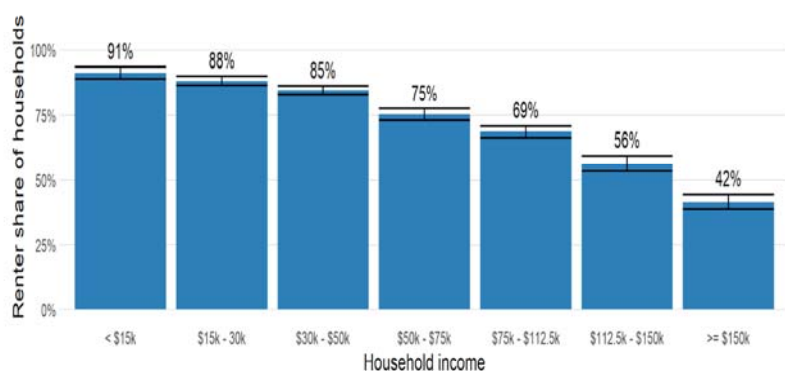
Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

**The majority of households with at least one member working in a vulnerable occupation and income under \$150,000 were renters.**

The high proportion of vulnerable households that rent elevates concerns about the potential for rent payments to accrue during the COVID-19 crisis, placing a strain on both renters and building owners. Among households with at least one member in a vulnerable occupation, more than 85 percent of households with income below \$50,000 rented their home. Nearly 90 percent of households with income below \$30,000 rented their home.

#### Renter share of households with at least one member employed in a more vulnerable occupation by household income

New York City, 2018



Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

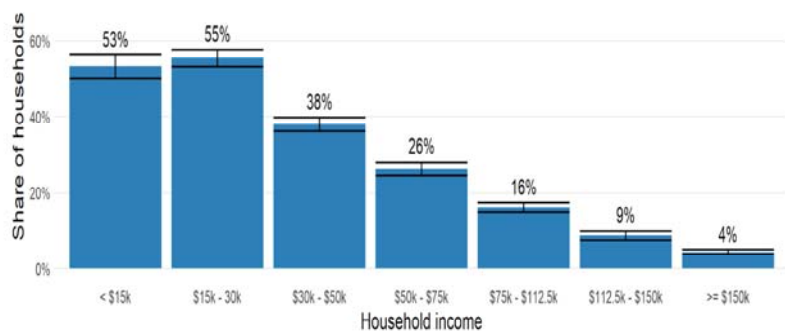
**Households with incomes between \$15,000 and \$50,000 were more likely to rely entirely on employment income from vulnerable occupations. These households may be hyper-vulnerable to the negative effects of job loss.**

About 548,700 New York City households relied entirely on earners that worked in vulnerable occupations in 2018. This group includes households that have only one vulnerable wage earner, such as a single parent, as well as households that have multiple earners in vulnerable occupations. The median monthly household income for households that exclusively relied on workers in vulnerable occupations was \$3,433.

Over half of households that had income below \$30,000 had all employed household members in a vulnerable occupation. For example, about 55 percent of households with incomes between \$15,000 and \$30,000 had all earners in vulnerable occupations.

### Share of households with all employed members in more vulnerable occupations by household income

New York City, 2018

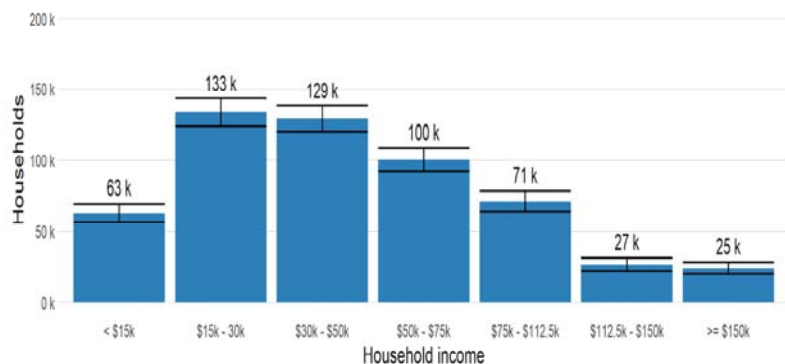


Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

### Households with all employed members in more vulnerable occupations by household income

New York City, 2018



Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

**Households with at least one worker in a vulnerable occupation and income under \$150,000 had a median rent of \$1,430 and a median household monthly income of**



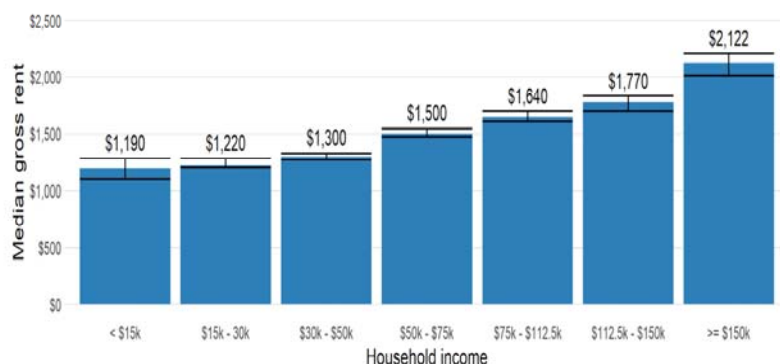
### **\$4,583.**

As policymakers weigh pathways to support renters in the midst of COVID-19, a key question has been the cost of rent for the most vulnerable households. If renters do not have emergency savings and are unable to pay their rent due to COVID-19 related shutdowns, they may emerge from the crisis in debt and/or at risk of eviction.

The median gross rent across all households with income below \$150,000 and at least one vulnerable worker was \$1,430. In contrast, the median gross rent for all households with income below \$150,000 and without a worker in a vulnerable occupation was \$1,580. Median monthly household income among households with at least one earner in a vulnerable occupation was \$4,583 in 2018, compared to median monthly income of \$6,250 for households without a vulnerable worker.

#### **Median rent for households with at least one member employed in a more vulnerable occupation by household income**

New York City, 2018



Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

#### **The pandemic may widen existing racial and ethnic income gaps, especially for Hispanic households, who disproportionately worked in vulnerable occupations in 2018.**

Close to 511,000 Hispanic earners worked in vulnerable occupations in 2018, more than any other racial group. About 48 percent of Hispanic wage earners were in vulnerable occupations in 2018, as

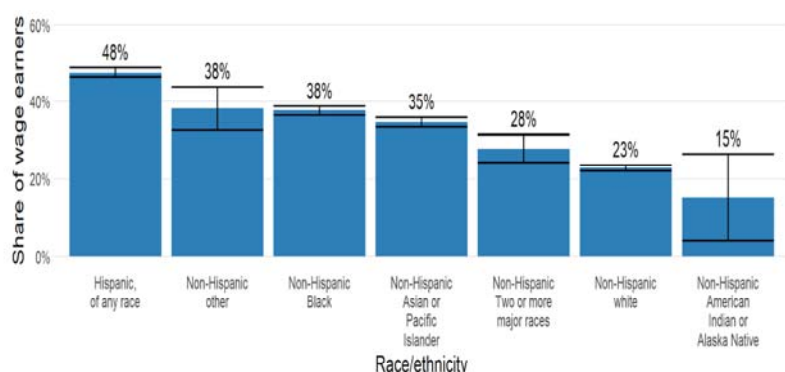


were 38 percent of non-Hispanic black workers, and 35 percent of non-Hispanic Asian or Pacific Islander workers.

In contrast, non-Hispanic white earners worked disproportionately in less vulnerable occupations in 2018; 23 percent of non-Hispanic white workers were in vulnerable occupations.

### Share of wage earners employed in more vulnerable occupations by race/ethnicity

New York City, 2018



Notes: Error bars represent 90% confidence intervals, and value labels reflect point estimates

Sources: American Community Survey (2018), IPUMS USA, NYU Furman Center

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